Deciding What Students Should Learn

How School Programs Are Developed in Alberta

1998

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ALBERTA EDUCATION CATALOGUING IN PUBLICATION DATA

Alberta. Alberta Education. Curriculum Standards Branch.
Deciding what students should learn : how school programs are developed in Alberta.

ISBN 0–7732–9887–8

1. Education — Alberta — Curricula. 2. Curriculum planning — Alberta. I. Title.

LB1564.C2.A333 1998 375.0097123

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The primary intended audience for this document is:

Administrators	
Counsellors	
General Audience	✓
Parents	
Students	
Teachers	

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WHAT ARE THE PROGRAMS OF STUDY?

Provincial programs of study are legal documents stating what students are expected to learn and be able to do in all subjects and grades. Their primary purpose is to set learner outcomes and high standards for all Alberta students.

School boards and their staff select teaching approaches, instructional materials, grouping methods and schedules that will meet the learning needs of their students. But the Minister of Education, through powers granted under section 25 of the *School Act*, establishes learner expectations and standards of achievement for all students in the province.

Although education is a provincial responsibility, educators and government leaders from across Canada are now participating in joint initiatives so they can more effectively meet their common program goals. The provinces and territories of Canada are working cooperatively on curriculum projects that set out common learner outcomes in various subject areas.[1] These common learner outcomes then become the foundation for provincial programs of study. Common learner outcomes help students to develop similar knowledge and skills so they can make smooth transitions if they move from one jurisdiction to another. Common outcomes also allow for the sharing of resource materials that will support programs in several jurisdictions.

In Alberta, there are programs of study for elementary, junior high school and senior high school students. In addition, Alberta has an approved *Kindergarten Program Statement*. A program of studies contains two types of information:

- a philosophy of learning
- general and specific learner expectations, or outcomes.

The **philosophy** includes "belief statements": why the program is offered, what the program is all about, and the basic principles about how students are to achieve the required knowledge, skills and attitudes. For example, a program of studies for mathematics may explain the broad concepts underlying the study of mathematics, how students learn mathematical concepts, and how mathematics knowledge, skills and attitudes can be used in everyday life outside the classroom.

[1] Alberta participates in cooperative curriculum projects through the *Western Canadian Protocol for Collaboration in Basic Education*, involving Manitoba, Saskatchewan, Alberta, British Columbia, Yukon Territory and the Northwest Territories; and the *Pan-Canadian Protocol for Collaboration on School Curriculum*, involving the ministers of education of all provinces and territories.

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The **learner expectations** or **outcomes** are clear and detailed statements of the knowledge, skills and attitudes that students are expected to learn in each subject at each grade or level. For example, by the end of the Grade 6 language arts program, students are expected to compose stories with various elements like setting, theme, main characters and conclusion, using proper sentence structure, spelling, grammar and punctuation. In mathematics, these same students are expected to understand and name numbers greater than a million; to add, subtract, multiply and divide; and to measure time, length, capacity, mass, perimeter, area, volume and angles. The science and social studies programs are usually organized by topic. Through these programs, students acquire specific knowledge about several topics, develop such skills as problem solving, and cultivate positive attitudes.

The *Curriculum Handbook for Parents* series provides summaries of the programs of study. See the For More Information section at the end of this booklet.

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WHAT RESOURCES SUPPORT SCHOOL PROGRAMS?

To offer instruction in any subject area at any grade level, teachers and other educators begin with the programs of study. The programs of study are the primary references; they establish clear directions about learner outcomes. But an effective learning/teaching process also requires many kinds of resources for students and teachers alike, for example, materials such as textbooks, videos, audiocassettes, manipulatives and computer software. These are sometimes called "instructional materials."

Potential materials are reviewed by Alberta Education, and those meeting provincial criteria become authorized as either student or teaching resources.

RESOURCES FOR STUDENTS

Student resources are categorized as follows:

- **Basic** learning resources address the majority of learner outcomes in a program of studies.
- **Support** learning resources address some of the learner expectations in one or more program of studies or help students to pursue particular interests and talents.
- Distance learning materials[2] meet student needs when:
  - small schools wish to offer a broader range of learning opportunities
  - a required, or desired, course will not fit into a student's regular school timetable
  - students wish to work through a course at their own pace with the guidance of a teacher
  - students who have left school wish to continue studying independently
  - students who are unable to attend school need instructional materials
  - parents who are offering a home education program require materials.

[2] Distance learning materials include student basic, or student support, or teaching resources that are usually developed by Alberta Education, sometimes in cooperation with a publisher, to support independent studies, instruction in small schools or alternative delivery of programs (virtual schools).

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RESOURCES FOR TEACHERS

Teachers may use some or all of the following resources to help them plan and deliver effective lessons:

- guides to standards and implementation for revised and new programs of study
- teacher materials to make effective use of student resources
- materials on adapting the programs of study for special needs students
- publications providing ideas for lessons, activities, and appropriate and effective teaching methods
- publications on learning theory; e.g., the development of thinking skills.

RESOURCES FOR STUDENT EVALUATION AND ASSESSMENT

Alberta Education develops:

- provincial student achievement tests at grades 3, 6 and 9 and diploma examinations in Grade 12 to provide information about how well students have met the learner expectations outlined in the programs of study for language arts, mathematics, science and social studies
- diagnostic assessment materials to help teachers recognize when learning difficulties are present or when more challenging activities might be required so that they can adjust instruction accordingly
- classroom assessment materials to help teachers determine student progress in achieving the provincial learner expectations for language arts, mathematics, science and social studies.

Many of the resources for teachers also include suggested evaluation strategies.

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WHAT GOES INTO THE MAKING OF A PROGRAM?

Before revising or developing a program of studies, Alberta Education carefully considers these fundamental questions.

- What do students really need to learn?
- What are student needs?
- What are the needs and expectations of society as a whole?
- What is the nature of the subject area?
- What is the nature of the learning environment?

WHAT STUDENTS REALLY NEED TO LEARN

The Alberta government has defined what all students must know and be able to do. These expectations are incorporated in the three-year business plan for education[3] in Alberta. Expectations are reviewed regularly to ensure that they continue to reflect the essential knowledge, skills and attitudes that Alberta students should develop. Common learning outcomes, developed in consultation with other provinces and territories, provide the foundation for some of Alberta's programs. As well, through the consultation process used to develop programs of study, many people have an opportunity to present their suggestions on what students should learn to be well-prepared for the future.

STUDENT NEEDS

The programs of study are designed to accommodate:

- student needs and abilities—intellectual, social, emotional and physical—at different ages and stages of growth
- student cultural differences
- connections among school subjects, between grades, and between school and the workplace.

[3] *The Government of Alberta's 3-Year Plan for Education.* This publication is updated annually.

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SOCIETAL NEEDS AND EXPECTATIONS

The programs of study are designed to reflect:

- the general consensus of Albertans about appropriate roles and responsibilities for parents, teachers and all others who are directly involved in the education of students
- Canada's linguistic and cultural diversity, and the nation's common goals
- the rapid pace of change—economic, technological, social, cultural and political—provincially, nationally and around the world
- other important provincial, national and global issues.

The programs of study also reflect provincial government documents and guidelines. These include the *School Act*, education policies and regulations set by the Minister, the business plan for Alberta Education, and interprovincial agreements on program development.[4]

NATURE OF THE SUBJECT AREA

Each program of studies:

- provides a foundation of knowledge and understanding of the major ideas in a subject area
- incorporates new discoveries and theories that are generally accepted by experts in the field
- addresses skills that are fundamental to success in learning a subject, and indicates the most appropriate level at which the skills are to be acquired
- addresses how the study of a subject contributes to student growth and development.

NATURE OF THE LEARNING ENVIRONMENT

The home, school and community all contribute to learning and can create an "environment" for learning. Therefore, a program of studies is designed to accommodate:

- various types of instructional approaches
- available facilities, equipment and learning resources
- various ways of delivering a program to students, including new technologies and use of community resources; e.g., distance learning, workplace learning.

[4] The business plan and specific documents on program development are available from Alberta Education. See the For More Information section at the end of this booklet.

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WHEN DO WE REVISE PROGRAMS AND DEVELOP NEW ONES?

Typically, a program is revised, or a new one developed, when:

- there are major changes in education policy[5]
- the Minister of Education receives recommendations for change from a public advisory group
- the needs of students and society have changed
- new knowledge becomes available—about a subject area or about how students learn and develop
- the program is no longer consistent with other programs and a need for change is identified within Alberta, regionally or across Canada[6]
- the program design is out of date
- the resources are out of date
- significant numbers of students are not performing at expected levels of achievement.

It is important to maintain a balance when considering changes to existing programs; changes are made when the need becomes apparent, but at the same time students, teachers and other Albertans need time and resources in order to adjust to the changes. Programs cannot change annually, nor can they remain static for long periods of time. In some instances, a program is reviewed, but only minor changes result. An example of a minor change would be the addition or deletion of knowledge content, or a change in the grade placement of knowledge content. These minor changes rarely affect the role of teachers as they do not require changes in teaching practices.

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[5] For example, Alberta Education's *Framework for Enhancing Business Involvement in Education*, 1996 and *People and Prosperity: A Human Resource Strategy for Alberta*, 1997, called for school programs that do more to help students develop employability skills and prepare for various careers.

[6] Alberta participates in the *Western Canadian Protocol for Collaboration in Basic Education* and the *Pan-Canadian Protocol for Collaboration on School Curriculum*.

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HOW DO WE DEVELOP PROGRAMS?

Developing a new provincial program of studies is a major undertaking involving many people. Three main groups play a direct role in the process.

- Staff of Alberta Education provide leadership. It is their job to move the project ahead, on time and on budget, and still develop a product of the highest quality possible. As representatives of the Minister of Education, they ensure that programs reflect the government's policies and guidelines. They also coordinate the collection of information and research for programs and resources.

- Advisory groups provide input throughout the program development process. Most advisory groups are made up of teachers, school and school board administrators, people from post-secondary institutions, business and other community members and organizations.

- Teachers share their practical knowledge about a subject area, about the needs of students at specific ages and grade levels, and about effective teaching methods. Teachers do much of the hands-on work. For example, they help to develop learner outcomes for students, and they review and validate draft programs and potential resources.

All Albertans are invited to review draft programs and provide their advice and comments at meetings, forums, workshops or by telephone, fax, letter or email. See the How You Can Help section at the end of this booklet.

Alberta Education staff carefully consider the comments from the advisory groups and from other Albertans. In most cases, suggestions are reflected in the new program of studies, but on some occasions not all of the ideas presented are included in the final program. In such cases, Alberta Education staff who are responsible for preparing the program indicate the reasons for not addressing the advice received.

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The development process and timelines vary from one program to another. Usually, there are seven stages, but these stages may be combined or overlapped for some projects. For example, one part of a program may still be in the development stage while another part is being validated. The stages usually include:

- Stage 1: New Policies and/or Reviews
- Stage 2: Work Plan
- Stage 3: Development
- Stage 4: Validation
- Stage 5: Authorization
- Stage 6: Implementation
- Stage 7: Maintenance and Evaluation.

STAGE 1: NEW POLICIES AND/OR REVIEWS

Sometimes changes in programs are the result of a new government policy, the report of a task force or other advisory group, or a new interprovincial initiative. In other cases, reviews are carried out on a current program to help find out if the program of studies needs to be changed, and if so, what kind of changes are required. The plan for a program review outlines:

- reasons for doing a review
- major issues and questions to be addressed about the program of studies, resources for students and teachers, and student evaluation
- methods to be used to collect necessary information
- who will take part in the review
- timelines and communications plans.

The first questions to be asked in a review are: should the program and resources be:

- kept as they are
- kept, with minor revisions
- revised
- replaced
- discontinued?

To answer these questions, information is collected using some of the following procedures.

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- *Albertans from across the province help to identify the needs of students and set directions for the future.*

  Albertans are in the best position to say what our students need. They can also provide good advice about which needs should be met through a program of studies, and which needs should be met by other programs, by the total school program or by agencies and groups outside the school.

  Through notices on the Internet, at meetings, or in letters to groups, Albertans are invited to provide their comments and ideas. Students, teachers, parents, principals, superintendents, school trustees, educational associations, post-secondary institutions, business and industry, government departments, and community members and agencies, are all encouraged to participate.

  Albertans help to answer questions about how well a program of studies and its resources are currently meeting student needs and how they could be improved. Here are some sample questions Albertans might be asked.

  - "Are the knowledge, skills and attitudes in the program of studies the most important ones for students to learn?"
  - "Is the program providing the knowledge, skills and attitudes students need for responsible citizenship, daily life, further education and entry into the workplace?"
  - "Are there gaps between what the program expects students to learn, and what students are actually learning and achieving?"
  - "If there are gaps, how can they be eliminated?"
  - "Do the resources help teachers prepare lessons and select approaches that meet student needs?"

- *Alberta Education collects further information to support the decision-making process.*

  Additional information-gathering steps may include:

  - meetings, interviews, questionnaires

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- reviews of current research on student learning and development, societal changes and new knowledge in a subject area
- reviews of current information about successful teaching methods and approaches
- reviews of programs being used in other parts of Canada and in other countries
- discussions with other Canadian provinces and territories
- reviews of results from provincial student evaluation programs and the ideas of teachers who have been directly involved in the evaluation process
- reviews of information collected through visits to schools and classrooms.

Staff at Alberta Education compile the information collected, summarize the findings and then determine the appropriate next steps.

STAGE 2: WORK PLAN

Whether the decision is to revise an existing program or to develop an entirely new one, a work plan is prepared. For interprovincial projects, the work plan is usually prepared by the lead jurisdiction, in cooperation with the other provinces and territories participating in the project. A work plan addresses the following:

- reasons for revising the program or developing a new one
- background information—the results of provincial and interprovincial consultations, and research that supports proposed changes or new directions
- a description of what the program will look like—key features or major changes being proposed
- the proposed development process:
  - a list of the major tasks
  - information about who is to be responsible for the completion of tasks
  - the timelines and budget for each task
  - strategies for receiving formal and systematic advice throughout development
  - what standards will be used to measure how well the program meets student needs

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- an analysis of the ways in which the program might affect:
  - resources for students and teachers
  - student evaluation resources
  - school facilities and equipment, including technology
  - community resources
  - the need for teacher inservice
- a communications plan.

STAGE 3: DEVELOPMENT

Although Alberta Education is responsible for managing program development, school boards sometimes take on this role in cooperation with the department. Teachers do much of the practical work. They provide advice about the program of studies and help to review or develop resources, especially resources for distance learning and student evaluation. However, most student resources and teacher instructional manuals are prepared by publishing companies. Publishers are invited to submit resources to support the revised or new program, and all materials are assessed according to the same criteria.

Advisory groups are set up to review the draft program and resources, make recommendations and guide the activities of program developers. A key role of the advisory groups is to ensure that the program of studies and resources are consistent with the work plan.

The advisory groups also help to ensure that the draft program of studies meets the following requirements:

- inclusion of statements about students and learning, general learner expectations and specific learner expectations or outcomes
- consistency with learning and teaching theory
- consistency with current government policy
- accommodation of student differences, needs and abilities.

Educators and other interested Albertans also provide suggestions for drafts of a program of studies and its resources. Their comments and advice are used to revise the documents, to choose or prepare more appropriate resources and to set standards for student performance.

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STAGE 4: VALIDATION

Validation involves:

- internal screening by Alberta Education
- external or "field" review processes to obtain ideas and suggestions from teachers and other Albertans.

Alberta Education's internal screening process considers these questions.

- Are essential knowledge, skills and attitudes addressed adequately in the program of studies and resources?
- Do the program of studies and resources match the intellectual, social, emotional and physical needs and abilities of students of that age at that level?
- Do the resources accommodate various student learning styles and rates of learning?
- Do some of the resources address students with special needs; e.g., students who have learning or developmental disabilities, or who are gifted?
- Are the resources based on sound instructional design?
- Do the program of studies and resources comply with government policy on promoting respect for and understanding of Alberta's and Canada's cultural diversity?

All interested parties throughout the province have an opportunity to review draft materials to ensure that they meet the needs of students and their communities. This external review varies according to the situation. In some cases, it may include a pilot or actual use of the draft program of studies and resources in a few classrooms. The time involved for the external review ranges from a few months to a full school year or longer. The results of external reviews are studied carefully before any further changes are made.

STAGE 5: AUTHORIZATION

Under section 25 of the *School Act*, the Minister of Education approves all programs of study and authorizes them for use in Alberta schools. The Minister is responsible for making the final decision about key issues.

- Does the program fully meet the needs of students and society?

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- Does the program reflect the views and expertise of Albertans?

- Is it feasible to offer the program in schools throughout the province?

Alberta Education staff also consider the information collected on resources during the review and validation process, and they determine which ones are to be placed on the provincial list of authorized materials to support a revised or new program of studies.

STAGE 6: IMPLEMENTATION

From the earliest stages of the development process, Alberta Education strives to keep teachers and other Albertans well-informed about potential changes. A program of studies, and information on resources, is distributed well in advance of program implementation dates. Also, the program of studies, and resource information, is posted on the Internet. Most teachers are quite familiar with program changes because of their involvement in one or several of the development and validation phases; or in workshops, seminars and orientation sessions.

Who is responsible for introducing a new program of studies to the schools? It is a shared responsibility of Alberta Education, school boards and classroom teachers.

- Alberta Education makes a new program of studies and resource listings available to schools throughout the province. The department may organize orientation sessions and workshops for teachers and school board staff and sometimes produce materials to support implementation, or provide program information to administrators and counsellors.

- School boards across the province support professional development for teachers, including the introduction of a new program. There may be a variety of networks and workshops designed to share ideas, strategies and materials. School boards and their staff also determine which resources they will use in their schools to support a new program. They may select materials from the provincial resources list or select other support materials of their own choosing.

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- The Alberta Teachers' Association specialist councils and other education partners typically play an active role at this stage. These education partners may assist by providing resources and workshops to help teachers implement a new program.

STAGE 7: MAINTENANCE AND EVALUATION

Even after a program is designed, developed, validated, authorized and implemented, it is open to further review. Minor revisions may be needed over time. For example, teachers or members of the general public may have concerns about how well a program is meeting the evolving needs of students. Also, a process is in place for periodic review and minor updates to provincial programs of study, as well as those developed in cooperation with other provinces and territories.

Alberta's programs are not only excellent, but well-received regionally, nationally and internationally. Yet, there is always room for improvement. Albertans continue to provide comments and suggestions to improve programs and resources. If significant weaknesses are noted, the cycle begins again.

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The support and interest of people inside and outside the education system is always welcomed and appreciated. Many Albertans have made a significant contribution to our excellent school programs by sharing their advice and ideas.

You can get involved, by:

- providing input when the provincial government conducts comprehensive reviews of education and/or consults with Albertans about new policies
- reviewing draft programs of study
- attending meetings, conferences or seminars about proposed programs
- contacting Alberta Education, by telephone, fax, letter or email, to express your views.

FOR MORE INFORMATION

If you have questions about any topic or document cited in this booklet, or about other aspects of Alberta's Kindergarten, elementary, junior high or senior high school programs, call or write:

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FEEDBACK

Deciding What Students Should Learn: How School Programs Are Developed in Alberta, 1998

We would like to know what you think about this booklet. Are you a:

____ Parent ____ School Administrator

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____ Other (please specify) _____

1. I found this booklet:

   _____ extremely informative _____ somewhat informative

   _____ informative _____ not very informative.

2. How could this booklet be improved?

   _____

   _____

   _____

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3. Other comments and suggestions.

   _____

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